**Data Visualization Checklist**

**Ranking Description**: **2** - Illustrates that all components are met; **1** - Component was partially met; **0** - The component is not met

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| **Guidelines (ranked from most important to least)** | **Rating (2, 1, 0, N/A)** |
| Check Graph Type, make sure the graph type is appropriate for the information to be visualized. |  |
| Provide clear, detailed and thorough labeling to avoid scale distortion and ambiguity. |  |
| Plot type should be appropriate to represent relationships in the data and deliver the intended messages. |  |
| Provide a descriptive title, axis labels and explanatory annotation, legend if needed. Text size should be readable. |  |
| Maximize data-ink ratio (non-data ink: scales, labels, edges) |  |
| Avoid chart junk (i.e. unnecessary gridlines, redundant background color and display frames) |  |
| Maximize data density (shrink graphics, maximize amount of data shown) |  |
| No more than 20 stimuli (i.e. shape, color, brightness) in a single plot for visual elements to be distinguishable. |  |
| Avoid splitting one representation into multiple windows. |  |
| Data should be displayed in an order that makes logical sense. |  |
| Don’t use high saturation, spectrally extreme colors together. |  |
| For large regions, don’t use highly saturated colors (pastels would be a good choice). |  |
| Use red and green in the center of the view. Use black, white and yellow in periphery. |  |
| Use colors for highlighting and grouping, keep in mind that less is sometimes more. Also, be mindful of the issue with colorblindness. |  |
| Show data variation, but not design variation. Avoid unintended size coding. |  |
| Subtitles or annotations provide information, strategicallyuse subtitles and annotations to provide additional/highlight information to readers |  |
| **Total Score:** |  |

**Reference:**

Data Visualization Checklist by Stephanie Evergreen & Ann K. Emery (May 2016), <http://stephanieevergreen.com/wp-content/uploads/2016/10/DataVizChecklist_May2016.pdf>